

Project #1 Description

Object Oriented Programming, 14014110-3

Week #8, Sunday 18 October 2020

(Total: 20 Marks)

Due Date: Week #10, Sunday 1 November 2020

"Hospital Information System" application

Please follow these instructions:

- This is a **student project** so **every student** must complete it in his own and by himself.
- All submitted projects must be unique and any duplicated projects will receive ZERO.
- The project must be submitted before the deadline and any late projects will receive ZERO.
- Include a Word document that includes assumptions and several screenshots of your Netbeans IDE application as well as the output screenshot results.
- Submit your code as .zip compressed file via the online Blackboard system. Name of the compressed file should include your name and student number.

The project description:

As a programmer, you have been asked to write a Java application, using OOP concepts, for a **Hospital** with the following requirements:

- The **Hospital** has several employees and each one of them has an **ID** (int), **name** (string), **address** (string), **mobile phone number** (string), **email** (string) and **salary** (double) with suitable data types.
- The employees are divided into:
 - **Administration staff**: who have in addition to the previous information their **position** (string).
 - **Doctor**: who have also a **rank** (string) and **specialty** (string).

The project requirements:

- You will need to create all the needed Java classes with all the required information.
- You have to apply all the OOP (Object Oriented Programming) concepts that we have covered in this module (i.e. inheritance, polymorphism, interface and collections)
- **Include a Microsoft Word document (name it as readme.doc) that includes several screenshots of your Netbeans IDE application GUI interface as well as the output screenshot results. Provide all assumptions that you have made during design and implementation.**
- **Include the whole Netbeans Java project with all source codes. Write as much comments as possible**

to document your source codes.

At the end, you will need to create a testing class (e.g. Hospital.java) with the static main() method with the following requirements:

- It must have **initial fixed** collections of working staff (at least 3 administration staffs and 2 doctors)
- The program will print a selection screen where the user can choose the operation he/she wants to perform. The selection screen will be repeated after each selection until the staff type the number 4 to completely exit from the program:
 1. Add an administration staff (by providing all her/his information) to the list of all administration staff
 2. Add a doctor (by providing all her/his information) to the list of all doctors
 3. Print all working staff (remember to differentiate between administration staff and doctors in the output printout)
 4. Exit the program